This chapter of the AFS Designer must be read in conjunction with all chapters of the AFS Designer. Important legal statements on inside back cover.
I | Architectural Detailing

Disclaimer: This section of the AFS Designer is intended only by AFS to represent good building practice in achieving suitable architectural detailing of AFS LOGICWALL®. This section is not intended in any way by AFS to represent all relevant information required on a project. It is the responsibility of those using AFS LOGICWALL®, including but not limited to builders, designers, consultants and engineers, to ensure that AFS LOGICWALL® is suitable for use on a project in relation to architectural design. All diagram, plans and illustrations used in this section including any reinforcement shown are included for indicative and diagrammatic purposes only. It is the responsibility of those using AFS LOGICWALL® to ensure that reference is made to the structural engineer’s details for all diagrammatic and reinforcement requirements.

I1 Introduction

The architectural detailing and design of AFS LOGICWALL® for building projects requires the services of professional consultants, such as architects and engineers. This chapter has been prepared to assist consultants in project documentation and outlines a range of typical details.

Whilst examples of previously successful details are included throughout this chapter it does not replace the services of professional consultants nor is to be relied upon as a complete library of details as site conditions can vary from project to project.

I2 Standard Details

Note:
1 - Except as noted on the following details, materials and work required are not provided by AFS or the LOGICWALL® installation contractor.
2 - All details in this chapter are diagrammatic only and not drawn to scale.

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# 12.0 Recommended Finishes Schedule

**Amend to suit Project**

## EXTERNAL

<table>
<thead>
<tr>
<th>Location</th>
<th>System</th>
<th>LOGICWALL® Requirements</th>
<th>Panel Joints</th>
<th>Finishing System(1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine, Coastal(2)</td>
<td>Refer AS3600</td>
<td>External Flush Set</td>
<td>Refer Façade Consultant</td>
<td></td>
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<tr>
<td>Near Coastal (1 to 50 km)</td>
<td>F’c 40 Mpa minimum Central reinforcement only All external fitting, fixtures, render strips to be UPVC or Stainless.</td>
<td>External Flush Set</td>
<td>Dulux AcraTex High Build System, Duspec AC1202 Issue 4. Dulux Material Warranty (Project Specific) 10 year applicable on approved systems incorporating (2) final Weatherproofing AcraShield or AcraSkin Topcoat. 10 year applicable on approved systems incorporating (1) final Weatherproofing AcraShield or AcraSkin Topcoat.</td>
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<td>Inland Tropical</td>
<td>Standard AFS LOGICWALL®</td>
<td>External Flush Set</td>
<td>DULUX Acratex - AFS LOGICWALL W&amp;W Interior Finish System. Issue 1.1</td>
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## INTERNAL

<table>
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<th>LOGICWALL® Requirements</th>
<th>Panel Joints</th>
<th>Finishing System(1)</th>
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<td>DULUX Interior</td>
<td>Standard AFS LOGICWALL®</td>
<td>Internal Flush Set</td>
<td>DULUX Acratex - AFS LOGICWALL W&amp;W Interior Finish System. Issue 1.1</td>
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<tr>
<td>System 1 - Joint Setting Only</td>
<td>Standard AFS LOGICWALL®</td>
<td>Internal Flush Set</td>
<td>not used</td>
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<tr>
<td>System 2 - Joint Setting and Skim Coating</td>
<td>Standard AFS LOGICWALL®</td>
<td>Internal Flush Set</td>
<td>Method 1 - Spray applied thin Gyprock Total Joint Cement  Method 2 - Roller applied thin Gyprock Total Joint Cement</td>
<td></td>
</tr>
</tbody>
</table>

(1) Refer AFS Data Manual for Details and specifications for finishes.

(2) All external fixtures, fixings, moldings etc in Coastal or Marine Environments AS2312 Classification D or greater to be UPVC or Stainless.

Note: All external steel fixtures, fixings, mouldings to be galvanized.
I2.1 Slab Junction Details

I2.1.1 Horizontal Expressed Joint With Rebate in Slab Edge

1. The horizontal joint is recessed on site.
2. Joint is taped and set with external coating system by external coating applicator. Refer to detail I 2.1.4.
3. The 20mm PVC render mould section is applied to the joint (by external coating applicator). Refer to detail I 2.1.4.
4. Trowel on acrylic render and waterproof membrane is applied to the entire wall surface area (by external coating applicator).

WALL REINFORCEMENT TO PROJECT ENGINEER’S SPECIFICATION

AFS LOGICWALL

TWO CONTINUOUS BEADS OF SEALANT UNDER FLOOR TRACK ON ALL EXTERNAL WALLS AND INTERNAL SEPARATION WALLS, BY OTHERS.

SET DOWN IN SLAB RECOMMENDED (BY OTHERS).

PAINTABLE WATERPROOFING MEMBRANE BY OTHERS.

CONCRETE FLOOR SLAB TO ENGINEERS DETAILS, BY OTHERS.

STEEL CLINCHING ANGLE AND AFS FRAME WITHIN SLAB ZONE (CAN BE REMOVED ONSITE WHERE REQUIRED).

EXTERNAL FINISHES TO PROJECT’S SPECIFICATION (REFER RECOMMENDED FINISHES SCHEDULE).

EXTERNAL FINISHES TO PROJECT’S SPECIFICATION (REFER RECOMMENDED FINISHES SCHEDULE).

WALL TO SLAB COLD JOINT.

EXTERNAL

INTERNAL

LAP

REFER HORIZONTAL JOINT DETAIL.

EXTERNAL FINISHES TO PROJECT’S SPECIFICATION (REFER RECOMMENDED FINISHES SCHEDULE).

WALL TO SLAB COLD JOINT.

EXTERNAL FINISHES TO PROJECT’S SPECIFICATION (REFER RECOMMENDED FINISHES SCHEDULE).

WALL TO SLAB COLD JOINT.
I 2.1.2 Horizontal Expressed Joint With Flat Plate Slab Edge

1. The horizontal joint is recessed on site
2. Joint is taped and set with external waterproofing membrane by external coating applicator
   Refer to detail I2.1.4
3. The 20mm PVC render mould section is applied to the joint
   (by external coating applicator)
   Refer to detail I2.1.4
4. External Finishes to project specification
   (Refer recommended finishes schedule)

Wall to slab cold joint

**EXTERNAL**

**INTERNAL**

- Vertical and horizontal reinforcement to engineer’s details
- AFS LOGICWALL
- Two continuous beads of sealant under floor track on all external walls and internal separation walls by AFS LOGICWALL installation contractor
- Paintable waterproofing membrane
- Concrete floor slab to engineer’s details
- Steel clinching angle and AFS LOGICWALL frame within slab zone. (Can be removed on site where required).
2.1.3 Horizontal Joint With Cover Plate On Slab Edge

- **9mm CFC cover strip or equivalent**
- **Flashing**
- **Concrete wall to slab cold joint**
- **Sealant**
- **Concrete floor slab to engineer’s details**
- **Internal applied finishes**
- **Two continuous beads of sealant under floor track on all external walls and internal separation walls, by others.**
- **Concrete floor slab to engineer’s details**
- **Paintable waterproofing membrane by others**
- **Steel clinching angle and AFS frame within slab zone (can be removed onsite where required)**
- **Internal applied finishes by others**
- **External finishes to project’s specification (refer recommended finishes schedule)**
- **ALCOR flashing recommended**
- **LAP**
- **Vernical and horizontal reinforcement to engineer’s details**
- **AFS LOGICWALL**

**External**

**Internal**
I 2.1.4 Horizontal 20mm Expressed Joint

Horizontal joint is recessed on site.
Setting and waterproofing of joint to take place prior to application of the 20mm PVC render mould.

Setting and waterproofing of joint to take place prior to application of the 20mm PVC render mould.

External finishes to project’s specification (refer recommended finishes schedule).
2.1.5 Cavity Wall Detail – Flat Slab

**EXTERNAL**

- Vertical and horizontal reinforcement to engineer’s details
- AFS LOGICWALL
- Two continuous beads of sealant under floor track on all external walls and internal separation walls by AFS LOGICWALL installation contractor
- Paintable waterproofing membrane
- Flashing
- 9mm CFC cover strip or equivalent
- Sealant
- Concrete wall to slab cold joint
- External finishes to project’s specification (Refer Recommended Finishes Schedule).

**INTERNAL**

- Plasterboard sheeting
- Preformed hob system
- Membraned cavity
- Concrete floor slab to engineering details

**External finishes**

- Steer clinching angle and AFS LOGICWALL frame within slab zone (Can be removed onsite where required).
2.1.6 AFS LOGICWALL® Edgeform at Floor/Slab Junction

- Concrete wall to slab cold joint
- Steel clinching angle and AFS LOGICWALL frame within slab zone (Can be removed on site where required).
- Vertical and horizontal reinforcement to engineer’s details
- Maximum unsupported edgeform height is 200mm. For edgeform over 200mm, extra form work support is required.
- Internal sheeting shop drawn to soffit level (can be trimmed to site tolerances as required).
- External sheeting shop drawn to top of slab level or slab rebate level (can be trimmed to site tolerances as required).
- Internal applied finishes
- Concrete floor slab to engineer’s details
2.1.7 Slab Junction HOB Detail

EXTERNAL

INTERNAL

BAR PLACED ALTERNATE SIDE AT 1500 MAX CTNS

INTERNAL FINISHES TO PROJECT SPECIFICATION

LAP REINFORCEMENT TO AS 3600

AFS WALL CONTINUATION

VERTICAL AND HORIZONTAL REINFORCEMENT TO PROJECT ENGINEER’s SPECIFICATION

26-40mm FRAME EXTENSION

EXTERNAL FINISHES TO PROJECT SPECIFICATION (ALSO REFER RECOMMENDED FINISHES SCHEDULE)

REFER HORIZONTAL JOINT DETAIL

CONCRETE SLAB POUR

SLAB
I 2.1.8  Edgeform At Floor/Slab Junction

EXTERNAL SHEETING SHOP DRAWN TO TOP OF SLAB LEVEL OR SLAB REBATE LEVEL

EXTERNAL FINISHES TO PROJECT’S SPECIFICATION (REFER RECOMMENDED FINISHES SCHEDULE).

CONCRETE WALL TO SLAB COLD JOINT

MAXIMUM UNSUPPORTED EDGEFORM HEIGHT IS 200MM, FOR EDGEFORM OVER 200MM EXTRA FORM WORK SUPPORT IS REQUIRED BY OTHERS

FLASHING WATERPROOFING AND FLOOR COVERINGS BY OTHERS

VERTICAL AND HORIZONTAL REINFORCEMENT TO ENGINEERS DETAILS, BY OTHERS

AFS LOGICWALL INTERNAL APPLIED FINISHES BY OTHERS

EXTERNAL

INTERNAL
2.1.9 External Wall/Slab Junction For Typical Raft Slab

**EXTERNAL**

- External finishes to project's specification (Refer Recommended Finishes Schedule).
- Two continuous beads of sealant under floor track on all external walls and internal separation walls by AFS LOGICWALL installation contractor.
- AFS LOGICWALL punched floor track
- Flashing
- This horizontal joint can be treated using the banding strip or the membrane detail, as outlined in earlier details - dependent on the natural ground level.
- Edge beam to engineer's details

**INTERNAL**

- Vertical and horizontal reinforcement to engineers details,
- AFS LOGICWALL
- Paintable waterproofing membrane
- Void grout filled,
- Set down in slab as detailed by structural engineer
- Concrete floor slab to engineer's details
- Soil
- Edge beam to engineer's details
2.1.10 AFS LOGICWALL® Retaining Wall / Basement Wall Slab Junction

* Alternatively Basement Walls can be constructed using REDIWALL, another product by AFS.

www.rediwall.com.au
2.1.11 AFS LOGICWALL® Retaining Wall / Basement Wall Footing Junction

- Starter bars 600mm min. into wall panel to engineer’s details
- Flushing at slab level
- Floor slab to engineer’s details
- Vertical and horizontal reinforcement to engineer’s details
- Typical waterproofing membrane applied to wall, overlaid with “coreflute” as approved
- Polyurethane sealant placed under AFS floor track, prior to fixing. (Optional floor track refer to engineer’s specifications)
- Wall thickness to project specifications
- Backfilled to engineer’s requirements
- Maximum depth of fill to engineer’s detail

* Alternatively Basement Walls can be constructed using REDIWALL, another product by AFS.

www.rediwall.com.au
I 2.1.12 Wall Slab Junction, Beam System Parallel To AFS LOGICWALL®

- **INTERNAL**
  - AFS LOGICWALL
  - Vertical and horizontal reinforcement to engineer's details
  - Horizontal joint can be treated with any of the options from the horizontal joint details
  - Reinforcement to engineer's details
  - AFS LOGICWALL steel frame in slab zone to be cut out on site if required
  - Dimension as specified

- **EXTERNAL**
  - External finishes to project's specification (Refer Recommended Finishes Schedule)
  - Beam system
## 2.1.13 Wall Slab Junction, Beam System Perpendicular to AFS LOGICWALL®

### Diagram Description:
- **Slab beam system**
- **Vertical and horizontal reinforcement to engineer’s details**
- **Slab reinforcement to engineer’s details**
- **Beam bearing on AFS LOGICWALL walls, to engineer’s details**
- **AFS LOGICWALL**
I 2.1.14 Wall Slab Junction, Beam System Perpendicular to AFS LOGICWALL® Façade Wall

- Vertical and horizontal reinforcement to engineer’s details
- Slab reinforcement to engineer’s details
- Horizontal joint can be treated with any of the options from the horizontal joint details
- Beam bearing on AFS LOGICWALL walls, to engineer’s details
2.1.15 Permanent Formwork, Junction to AFS LOGICWALL® Façade Wall (i.e. Bondek or similar metal floor system)

- AFS LOGICWALL
- Vertical and horizontal reinforcement to engineer’s details
- Horizontal joint can be treated with any of the options from the horizontal joint details
- Reinforcing bars to engineer’s details
- Bondek bearing on AFS LOGICWALL walls to engineer’s details
- Tek screw each panel
- AFS LOGICWALL steel studs in slab zone, to be cut out on site if required
I 2.1.16 Permanent Formwork, Junction To Internal AFS LOGICWALL® (i.e. Bondek or similar metal floor system)

Concrete floor slab, to engineer’s details

Angle screwed to top of AFS LOGICWALL to support Bondek to engineer’s details

AFS LOGICWALL
### 2.1.17 Step Floor/Stair Landing

**AFS LOGICWALL**

- Concrete floor slab to engineer's details
- Formwork
- Wall thickness to project specifications
- Concrete wall to slab cold joint
- Horizontal and vertical reinforcing to project engineer's specifications
- Intermediate concrete slab

For AFS LOGICWALL edgeform detail refer to chapter J, fig J5.1.4 for joint finishing

Starter bars to intermediate slab, as specified by engineer. (FC sheeting can be removed on site as specified by the engineer's detail)

NOTE: Consult AFS technical representative before specifying this detail.
I 2.1.18  AFS LOGICWALL® Wall Connections To Stair Mid Landing

Starter bars to stair landing slab, as specified by engineer. (FC sheeting can be removed on site as required by engineers details)

Formwork

Fire escape stair mid landing, to engineer’s details

Horizontal and vertical reinforcement to structural engineer’s details

AFS LOGICWALL
2.2 Post-tensioned Slabs

2.2.1 AFS LOGICWALL® Post-tensioned Detail

- Vertical and horizontal reinforcement to engineer’s details
- AFS LOGICWALL
- Two continuous beads of sealant under floor track on all external walls and internal separation walls by AFS LOGICWALL installation contractor
- Paintable waterproofing membrane
- Alternative PT floor plan option (as specified by structural design)
- Two continuous beads of sealant under floor track on all external walls and internal separation walls by AFS LOGICWALL installation contractor
- Paintable waterproofing membrane
- Steel clinching angle and AFS LOGICWALL framework within slab zone (Can be removed onsite where required)
- 50mm PVC sleeve over starter bars in slab zone (grouted after initial tension)
- AFS LOGICWALL
- Slip joint required to structural engineer’s details
- Joint treatment as per details I2.1.1 to I2.1.4
- Tensioning cable
2.2.2 Post-tensioned Slab To AFS LOGICWALL® (Internal) Wall

- AFS LOGICWALL
- Post tensioning duct
- Ø50mm sleeve to be filled with non shrink grout after post-tensioning
- Slip joint required to structural engineer’s details
- Vertical and horizontal reinforcement to engineer’s details
### 2.3 AFS LOGICWALL Corners and Tee Junctions

#### 2.3.1 AFS LOGICWALL® Wall 90° Prefabricated Corner - Single Reinforcement Carriers (AFS120, 150, 162, 200)

Factory installed corner bars as per engineer’s specifications
Note: Alternative hook bar reinforcing can be adopted to engineer’s specifications.

90° (+8°)

Penetration for horizontal bar placement performed on site

Horizontal bar lap to engineer’s details

Maximum dimension 750mm

Refer to chapters E, F & J for finishing options.

External finishes to project’s specification (Refer Recommended Finishes Schedule).

Refer to AFS LOGICWALL Detail #11.
2.3.2 AFS LOGICWALL® Wall 90° Prefabricated Corner – Double Reinforcement Carriers - with "L" bars (AFS200D, 262D)

Factory installed corner bars as per engineers specifications
NOTE: Alternative hook bar reinforcing can be adopted to engineer’s specifications

90° (+-8°)

Refer to chapters E, F and J for finishing options

Maximum Dimension 750mm
2.3.3 AFS LOGICWALL® Wall 90° Prefabricated Corner – Double Reinforcement Carriers - with "U"-bars (AFS200D, 262D)

Factory installed corner U-bars as per engineers specifications

Refer to chapters E, F and J for finishing options

External finishes to project’s specification (Refer Recommended Finishes Schedule).

Maximum Dimension 750mm
I 2.3.4 Squint Corner Detail for 135° Corners or Angle

- Lap reinforcement to AS 3600
- Ends of the lining trimmed to suit dimension required by AFS LogicWall installation contractor
- Temporary galvanised angle, removed after concrete pour

LAP

Vertical and horizontal reinforcement to engineers details, by others

Temporary galvanised angle, remove after concrete pour

Finishes to project's specification (also refer recommended finishes schedule)
2.3.5 AFS LOGICWALL® Wall Tee Junction

- AFS LOGICWALL supplied with vertical joints recessed. Flushed on site
- AFS LOGICWALL Joiner Stud
- Tee Junction Stud fixed to wall face at 450mm centres
- Fibre cement removed from each hole in AFS LOGICWALL stud (performed on site)
- Horizontal and vertical reinforcing to structural engineer’s details

LOGICWALL supplied with vertical joints recessed. Flushed on site
12.4 Panel Joints

12.4.1 Movement Joint

NOTE: Can be dowelled if required structurally. Must be clearly specified and negotiated with installers at time of tender.
2.4.2 Fibre Cement Sheet Surface Joint (Vertical)

**EXTERNAL FINISHES TO PROJECT’S SPECIFICATION (REFER RECOMMENDED FINISHES SCHEDULE).**

**INTERNAL**

- Joint taped and set in accordance with manufacturers specification, by others.
- Cut for expansion joint after setting is complete (2-4mm wide through depth of setting). Fill groove with flexible sealant, by others.

*NOTE: Locations for sheet surface joints are to be nominated by project consultants and are required nominally every 6-8 metres.*
I 2.4.3 Double Height Wall – Horizontal Joint

NOTE: Issue regarding access, lifting and bracing need to be considered when specifying this detail.
### 2.5 Boundary Walls

#### 2.5.1 AFS LOGICWALL® Wall Adjacent To Existing Structure Flashing Detail

- **AFS LOGICWALL**
- **Internal and Horizontal Reinforcement to Engineers' Details, By Others**
- **External Finishes to Project's Specification (Refer Recommended Finishes Schedule)**

**External Acrylic Render System**

- Cut thought fibre cement sheeting and treat cut area with suitable waterproofing membrane after installing flashing.
- **Waterproofing Sealant**
- **Flashings**

**Detail #32**

**LOGICWALL to Neighbouring Building Flashing Detail**

- Vertical and horizontal reinforcement bars as stated by project engineer's details.

---

**EXTERNAL FINISHES TO PROJECT'S SPECIFICATION (REFER RECOMMENDED FINISHES SCHEDULE).**

- Steel clinching angle and AFS LOGICWALL frame within slab zone. (Can be removed onsite where required).

- Concrete floor slab to engineer's details.

- Concrete wall to slab cold joint.

- Alcor Flashing recommended.
I 2.5.2 Unfinished Covered Boundary Wall Flashing Detail

THIS DETAIL ONLY APPLIES WHERE WATERPROOF FLASHING IS NOT ACHIEVABLE AS PER DETAIL I2.5.1
2.5.3 Safety Balustrade / Boundary Wall Detail

- AFS LOGICWALL panel
- AFS LOGICWALL studs extend 40mm to locate panel above
- Concrete pour 3
- Tape and set external joint
- Horizontal and vertical "L" bar reinforcing to project engineers specifications
- Concrete pour 2
- Concrete pour 1
- Concrete floor slab to engineer's details
- Formwork
- Wall Brace
- 1000mm
- Cut out fibre cement board on site. Starter bars to intermediate slab, as specified by engineer, supplied by builder
2.6 Junctions with Other Wall Types

2.6.1 AFS LOGICWALL®/Plasterboard Wall Junction

- Paintable sealant,
- Setting “L” Bead,
- Plasterboard,
- Plaster set,
- Site installed end cap
- Wall fixing to architect’s specification
- Stud, track and plasterboard
- AFS LOGICWALL
2.6.2 AFS LOGICWALL®/Double Brick Junction

If brickwork is external or wet area, seal the fibre cement/concrete with paintable waterproof membrane prior to laying of bricks or application of any finishes. Ensure product used is compatible with specified finishes.

- **AFS LOGICWALL**
  - Paintable sealant
  - White set cement render or plasterboard

- **Set “L” bead**
- **Site installed end stud**
- **Brick ties fixed to AFS LOGICWALL using masonry nails or other suitable fixings as specified.**
- **Waterproof end of AFS LOGICWALL with suitable membrane. Paint prior to laying of brick walls**
### I 2.6.3 AFS LOGICWALL®/Brick Veneer Junction

**Studs fixed to AFS LOGICWALL using masonry nails or other appropriate fixings as specified**

**Site installed end stud**

**Brick ties fixed to AFS LOGICWALL wall using masonry walls or other suitable fixings as specified**

**Waterproof end of AFS LOGICWALL wall with suitable membrane. Paint prior to laying of brick walls**

**Brickwork**

**Set “L” bead**

**Paintable sealant**

**AFS LOGICWALL**

**Studs, track and Plasterboard**
2.6.4 Brick Veneer Facade Over AFS LOGICWALL®

- Foil board insulation placed over brick ties if specified
- Water proofing of slab set down as per architects specifications
- Flush set and paint or overclad as per finishing options set out in Chapter E
- Brick
- Brick ties
I 2.7 Doors, Windows & Openings

I 2.7.1 Fire Door Frames - Manufactured to suit AFS LOGICWALL® Profile - Option 1

Note: Fire door frame to be braced on site to prevent movement/twisting during concrete corefilling.
2.7.2 Alternative Fire Door Frames - Manufactured to suit AFS LOGICWALL® Profile - Option 2

- Temporarily screw fixed prior to pour
- Site installed end stud
- Door frame is core filled during the core filling of AFS LOGICWALL
- Metal straps at 1m centres (vertically inside the frame) by frame manufacturer
- Horizontal and vertical reinforcement to structural engineers specifications by others
- Throat size of door frame to match AFS LOGICWALL

Note: Fire door frame to be braced on site to prevent movement/twisting during concrete corefilling.
I 2.7.3 Alternative Non-Fire Rated Door Frames

All door frame components are supplied and installed by others.

Note: Door frame to be braced on site to prevent movement/twisting during concrete corefill.
2.7.4 Commercial Window Section

- Extra reinforcing bars above and below opening - as per project engineer’s specification.
- Fibre cement sheet.
- Custom formed blank closing stud to suit head + site.
- AFS LOGICWALL.
- Seal the vertical and horizontal fibre cement/concrete window surrounds with paintable water proof membrane prior to fitting of subframe or application of any finishes, by others. Ensure product used is compatible with specified finishes. Refer Chapters F & J for applied finishes.
12.7.5 Rebated Window Section

- Extra reinforcing bars above and below opening - as per project engineers specification supplied.
- Custom formed blank closing stud to suit head + site sections.
- Seal the vertical and horizontal fibre cement/concrete window surrounds with paintable waterproof membrane prior to fitting of subframe or application of any finishes. By others, ensure product used is compatible with specified finishes.
- Optional chamfer cut to external performed on site, by others.
- AFS LogicWall.
- Still section to be cut onsite plus rebated with temporary timber member, by others.

Note: The use of this detail will require coordination with window manufacturer and installer and will need to be detailed on a project specific basis and specified accordingly.
2.7.6 Opening in Wall

- **Extra reinforcing bars above and below opening - as per project engineers specification supplied**
- **Fibre cement sheet**
- **External acrylic render applied finishes as detailed in chapters F and J**
- **Seal the vertical and horizontal fibre cement/concrete window surrounds with paintable water proof membrane prior to fitting of subframe or application of any finishes, by others. Ensure product used is compatible with specified finishes.**
- **Trowel finish concrete to be waterproofed prior to window install, by others.**
### 2.8 Cast In Elements

#### 2.8.1 Cast In Lift Rails

Temporary plywood screw fixed onto "liftrail" and onto AFS LOGICWALL panel. Remove after concrete pour.

"Liftrail" assembly supplied by builder fitted into slot cut into AFS LOGICWALL on-site by AFS LOGICWALL installation contractor if negotiated at time of tender.

**NOTE:**
- Any and all "Cast-in" items should be clearly noted on drawings and it is the builders' responsibility to negotiate with the AFS LOGICWALL installers as to who is responsible for the fitting/casting-in of these items.

Horizontal and vertical reinforcement to structural engineers details, by others.
12.8.2 Services

- Gas bayonet as specified
- AFS LOGICWALL
- Electrical conduit as per specification by others
- Temporary screw to secure conduit in box, by others
- Face plate box temporarily secured by render plate during concrete pour, by others
- Locate in slab zone or ceiling void, by others

Slab Zone
Suspended Ceiling Zone
2.9 Balcony Walls

2.9.1 Balustrade Wall

Top of AFS LOGICWALL wall balustrade panel is waterproofed and texture coated, over PVC render angles to suppliers specifications.

Balcony upstand and slab are waterproofed as specified.

Balcony slab to engineers details.

AFS LOGICWALL

Line of first pour

Tiles on balcony including skirting tile

Balcony upstand and slab are waterproofed as specified

Trowel finished concrete

AFS LOGICWALL

Tiles on balcony including skirting tile

Reinforcement as detailed by project engineer

Temporary conventional bracing

Formwork

Recess and bead seal to stop water penetration

Fillet for drip groove

Balcony slab to engineers details

Details #31 Balcony Wall Detail
2.9.2 Balcony Dividing Wall

- Vertical and horizontal reinforcement to engineer’s details
- AFS LOGICWALL
- Two continuous beads of sealant under floor track on all external walls and internal separation walls by AFS LOGICWALL installation contractor
- Paintable waterproofing membrane
- Waterproof membrane both sides as specified
- Concrete slab, to engineer’s details
- Tiles
- LOGICWALL Balcony Dividing Wall Detail
I 2.9.3 Balcony Wall Detail Without HOB

EXTERNAL

DRIP GROVE

EXTERNAL FINISHES TO PROJECT’S SPECIFICATION (REFER RECOMMENDED FINISHES SCHEDULE).

VERTICAL AND HORIZONTAL REINFORCEMENT TO ENGINEERS DETAILS, BY OTHERS
AFS LOGICWALL
INTERNAL APPLIED FINISHES BY OTHERS
2.9.4 Balcony Wall Detail With HOB

**EXTERNAL**

- WATER RESISTANT CAPPING BY OTHERS
- WATERPROOF MEMBRANE BY OTHERS
- REINFORCEMENT TO PROJECT ENGINEER'S SPECIFICATION
- FALL
- VERTICAL AND HORIZONTAL REINFORCEMENT TO ENGINEERS DETAILS, BY OTHERS
- AFS LOGICWALL
- EXTERNAL FINISHES TO PROJECT'S SPECIFICATION (REFER RECOMMENDED FINISHES SCHEDULE)
2.10 Timber Component Connections

2.10.1 AFS LOGICWALL® Wall Timber Floor Junction

- AFS LOGICWALL
- Approved masonry anchor fixing to engineer’s specification
- Timber floor system, to engineer’s details
- Triple grip fixing, by others
- Horizontal timber bearer to engineer’s specification
I 2.10.2 Timber Top Plate Connection

- Timber Top Plate fixed with hold down bolts to project specifications
- Wall reinforcement to project specifications
- Cast-in threaded hold down bolts to project specifications
- AFS Logicwall
2.11 Blade Walls

2.11.1 AFS LOGICWALL® Blade Wall

- Prefabricated AFS LOGICWALL endcap stud installed on site
- PVC 90º setting beads
- Applied finishes
- Horizontal and vertical reinforcing to structural engineer’s details

External finishes to project’s specification (refer recommended finishes schedule).
### 2.12 Acoustic & Thermal Details

#### 2.12.1 AFS LOGICWALL® External Wall with Foil Board

**Diagram:**

- **AFS LOGICWALL**
- **Plasterboard**
- **Battens**
- **(Beta-Fix) wall clip**
- **Foil Board/insulation**

**Details:**

- **EXTERNAL**
- **EXTERNAL finishes to project specifications (Refer recommended finishes schedule)**
- **INTERNAL**

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**External finishes to project specifications (Refer recommended finishes schedule)**
I 2.12.2  AFS LOGICWALL® Separating Wall – Wet Area/Living Area or Wet to Wet Area where plumbing services are to be installed

Discontinuous Steel or timber lightweight stud wall

AFS LOGICWALL

WET AREA

LIVING AREA

Wet area cladding sheet

Waterproofing as specified

Concrete floor slab to engineer’s details
ARCHITECTS STANDARD NOTES

DESCRIPTION

AFS LOGICWALL comprises a steel frame made up of metal C section studs, with 6mm fibre cement sheets bonded to each side to form a sandwich panel in varying thicknesses of 120mm, 150mm, 160mm, 200mm and 262mm. The panels are erected on site, braced and core-filled with concrete to achieve load-bearing, fire and sound rated walls.

APPROVED INSTALLERS

AFS LOGICWALL is a proprietary system developed by AFS Products Group Pty Ltd. It is manufactured by AFS Products Group Pty Ltd and installed by approved Supply & Install Contractors. Contact details of approved installers are available from AFS Products Group Pty Ltd, phone 1300 727 237.

SCOPE OF INSTALLATION

Supply and install complete walling system, placement of reinforcing bars, core filling, including but not limited to:

1. All labour and materials
2. Forming and providing openings
3. Building in items provided by others
4. Making good of any damages or deformation to walls
5. Clean-up and removal of waste.

NB: Items not within scope of installer:

1. Craneage of panels to deck
2. Set out
3. Supply of reinforcing steel
4. External setting of joints

Corners

AFS prefabricated 90° corner units must be used in any 90° corner location. This ensures continuity at corners and minimizes setting.

AFS corners are available in configurations as follows:

- 90° modules
- Standard plan dimensions 450mm x 450mm
- Pre-installed corner bars – in accordance with the structural engineer’s details
AFS LOGICWALL PANEL TYPES

The following AFS LOGICWALL panel types are available and are to be used in locations shown on architectural and structural drawings.

- AFS 120
- AFS 150
- AFS 162
- AFS 200
- AFS 262

SERVICES

Hydraulic pipes are typically not installed within AFS LOGICWALL walls but either face fixed and battered over or installed in separate leaf walls. Where plumbing and services are to be installed in LOGICWALL walls they should be poly pipes and run vertically only from the slab above.

Electrical conduits are typically installed within AFS LOGICWALL walls. Conduits are made up prior to installation with elbow at top and electrical box fitted to bottom. Conduit is lowered into wall void and box fixed to pre-cut opening. A render plate is used to hold box secure until core filling and then removed. Electrical boxes are to be separated by at least one core in wall.

Care must be taken by services contractors to maintain integrity of fire and acoustic ratings when installing services, pipes and fittings. Refer to project specifications.

SHOP DRAWINGS

Detailed shop drawings will be prepared and submitted to builder or architect for approval prior to manufacture of panels. Shop Drawings are to be by AFS nominated drafting company. Please contact AFS on 1300 727 257 for contact details.

PRE-CORE-FILL INSPECTION

A pre-core-fill inspection must be undertaken to ensure all panels are straight and plumb, all corners are square and the required reinforcement on structural drawings is correctly installed inside the AFS LOGICWALL panels. Ensure all joints are properly secured and screw fixed at 450mm centres and all openings adequately braced.

CORE FILLING

Refer to Chapter K ‘Installation Guide’ of AFS LOGICWALL Designer for concrete requirements and core filling techniques.
CONSTRUCTION SEQUENCING

1. Form up first slab
2. Place L bars in slab
3. Pour and cure of first slab
4. Erect APS LOGICWALL panels, placing horizontal bars in sequence
5. Erect formwork of second slab
6. Run electrical services
7. Place vertical bars in walls using formwork as working platform
8. Cure fill APS LOGICWALL using formwork as a working platform
9. Set joints once joints are waterproofed.

NB: where a prefab floor system is used, the LOGICWALL may be core filled from a mobile scaffold prior to forming of second slab.

Sufficient notice should be given by the builder prior to core filing for inspection of APS LOGICWALL panels, reinforcement, and services. A signoff system should be implemented by the builder to ensure any services within the walls are correctly placed prior to core filing.

TOLERANCES

All walls and openings must be square, straight and plumb and comply with drywall construction tolerances to AS2589.

REFERENCE STANDARDS

AS 4255 Wind loads for housing
AS 1170.4 Earthquake loads
AS 1650 Galvanised coatings
AS 2315 Portland cement
AS 3600 Concrete structures
AS 3700 Masonry structures
AS 2589 Plasterboard
BIM (Building Information Modeling) has gained acceptance in recent years and is used for the design of many buildings today. There is a range of BIM software packages now available on the market, each providing consultants and building designers flexibility and ease of design.

Whilst there have been some basic modeling programs available in the past, recent technical advancements have allowed the introduction of more advanced BIM Software programs, such as Revit and Archicad, which are more versatile and allow designers, architects and engineers to build their projects on the screen as a comprehensive 3D model. These models provide consultants with a detailed view of the scope of their projects whilst providing subcontractors, tenderers and clients a complete 3D overview of their scope of works, as they embody significant amounts of project information.

To assist with the design and documentation of AFS LOGICWALL® walls, AFS provide a complete package of standard details, library parts/objects, wall families and 3D model components in the following file types:

- Revit
- Archicad
- DWG
- PDF (Standard Details)
I | Legal Statements

IMPORTANT LEGAL STATEMENTS
Reasonable efforts have been made to ensure the accuracy of this publication; however, any information and data contained herein is subject to change without notice. To ensure the information you are using is correct, AFS recommends you review the latest technical information available on the AFS website www.afswall.com.au, or alternatively call 1300 727 237 to speak to a Technical Representative.

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1. This technical manual named AFS Designer together with the design tables and associated information related to AFS LOGICWALL® has been prepared by AFS to assist design professionals using AFS LOGICWALL® including without limitation, developers, builders, engineers, architects or quantity surveyors with the design of structural walls.

2. It is the responsibility of the user to ensure that the use of this manual is appropriate and to exercise their own judgment when using this manual.

3. AFS does not accept any responsibility (whether for negligence or otherwise) for any consequence arising from the use or application of this manual.

4. The design and engineering of the structure of any building using AFS LOGICWALL® should only be undertaken by suitability qualified and experienced design professionals, engineers or consultants.

5. The full responsibility for the design, engineering and structural design, and certification of compliance with all relevant Australian Standards, BCA and any other statutory requirements at Local, State and Federal levels rest with the design professional, project engineer or project consultants including but not limited to the design engineer, acoustic consultant, energy efficiency consultant, fire engineer and any of their officers, employees, delegates, partners, agents and service providers of any nature.

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DEFINITIONS
The use of the terms ‘AFS LOGICWALL®’ and ‘AFS LOGICWALL® Walls’ throughout the AFS Designer are as follows;

AFS LOGICWALL®: Refers to AFS LOGICWALL® panels as permanent formwork prior to being installed & corefilled with concrete.

AFS LOGICWALL® Walls: Refers to AFS LOGICWALL® walls installed with concrete corefill incorporated.
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